



POWER CONTROL BASED ADMISSION METHODS FOR MAXIMUM THROUGHPUT IN DS-CDMA NETWORKS WITH MULTI-MEDIA TRAFFIC

ABSTRACT OF THE DISCLOSURE

A method for maximizing the data throughput over a multi-code DS-CDMA network by controlling the number of codes assigned to each user while controlling the power budget of each user so that each users bit energy to noise ratio is met along with the quality of service and frame error rate requirements. A method is also provided for maximizing the throughput over a variable gain DS-CDMA network in which each user uses only one code and changes the data rate and power to meet quality of service requirements. In both systems, new users will be admitted so long as the power budget and bit energy to noise ratio requirements of each user is maintained. Both systems become closed to new admissions if the addition of a new user would cause any active user to not meet its required performance.

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